MATVEYEVA, N.M

MATVEYEVA, N.M.

[Phase transformation in triple system of iron-chromium-vanadium. Abstract of a dissertation presented for the decree of candidate of applied sciences] Fazovye prevrashcheniia v troinoi sisteme zhelezo-khrom-vandii. Aftoreferat dissertatsii, predstavlennoi na soiskanie uchenoi stepeni kandidata tekhnicheskikh nauk. Moskva, Akademiia nauk SSSR, 1955. 11 p. (MLRA 10:9)
(Iron-chromium-vanadium alloys)

MATEYEVA, N.M.

USSR/Physical Chemistry - Thermodynamics, Thermochemistry, Equilibria, Physical-Chemical Analysis, Phase Transitions. B-8

Abs Jour: Referat. Zhurnal Khimiya, No 2, 1958, 3790.

Author : I. I. Kornilov, N.M. Mateyeva.
Inst :
Title : Phase Transitions in Chromium-Vanadium System.

Orig Pub: Zh. neorgan. khimii, 1957, 2, No 2, 356-366.

Abstract: The phase transitions in the Fe - Cr - V system were studied by the methods of differential thermal analysis (DTA), of hardness and electric resistivity measurement and of microstructural and roentgen-structural analyses in compositions corresponding to sections with constant Fe content of 50 at. (P_1) and constant Cr : V ratios of 1 : 3 (P_2), 1 : 1 (P_3) and 3 : 1 (P_4). At high temperatures, the alloys are ternary solid solutions of ferrite subject to the transformation $\delta \rightarrow \alpha$ at annealing or slow cooling; the temperature of the transformation determined for P_1 by the

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Card : 1/2

MATVEEVA, N.M.

USSR/Physical Chemistry - Thermodynamics, Thermochemistry, B-8
Equilibria, Physical-Chemical Analysis, Phase Transitions.

Abs Jour : Referat Zhur - Khimiya, No 1, 1958, 392

Author : N.N. Kornilov, N.M. Matveyeva.
Inst : -
Title : Transformation Speed of α -Solid Solution into δ -Phase in System Fe - Cr - V.

Orig Pub : Zh. neorgan. khimii, 1957, 2, No 6, 1383-1391

Abstract : The phase composition of the ternary system iron - chromium - vanadium at 700° was studied by the method of measuring the transformation speed. The transformation speed of an α -solid solution into the δ -phase was determined from the data of the change of the magnetic saturation of alloys tempered at 1350° during their annealing at 700°. Alloys situated on the section FeCr - FeV and on the three angle sections with the ratios of Cr to V of 1 : 3, 1 : 1 and 3 : 1 were studied. The formation speed of δ -solid

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USSR/Physical Chemistry - Thermodynamics, Thermochemistry, B-8
Equilibria, Physical-Chemical Analysis, Phase Transitions.

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 392

solutions from α-solutions of the compounds FeCr and FeV is the maximum in case of alloys, the composition fo which is close to the composition of FeV, and the minimum formation speed is in case of alloys close to FeCr. The phase composition of ternary alloys was determined for alloys on angle sections basing on the curves magnetic saturation - time and composition - time of transformation of a half. The boundaries of phase regions at 700° coincide with boundaries established by other methods of physical-chemical analysis.

Card 2/2

MATVEYEVA, N.M.

AUTHORS: Kornilov, I.I. and Matveeva, N.M. 571

TITLE: Phase Transformation in the System Iron - Chromium- Vanadium. (Fazovye Prevrashcheniya v Sisteme Zhelezo - Khrom - Vanadiy).

PERIODICAL: "Zhurnal Neorganicheskoy Khimii" (Journal of Inorganic Chemistry, Vol.II, No.2, pp.355-366. (U.S.S.R.), 1957

ABSTRACT: Because of the insufficient amount of experimental material on alloys of iron with chromium and vanadium there is a clear need for a detailed study of phase transformations in the system, associated with the formation of solid solutions of the metallic compounds FeCr and FeV. The present work was undertaken with this aim in view and also with that of finding the ranges for the existence of these compounds. The alloys corresponding to four sections of the ternary system were studied. Differential thermal analysis, hardness, electrical resistivity, micro-structural and X-ray structural analysis were used. At high temperatures the alloys of iron with chromium and vanadium are ternary ferritic solid solutions in the hardened state. On annealing or slow cooling the ferritic solid solutions undergo a $\delta \rightarrow \alpha$ transformation. The formation of the δ-phase is expressed in the loss by the alloys of ferromagnetic properties and increase in hardness and brittleness. The temperature of this transformation was determined by differential thermal analysis. For alloys of the section corresponding to 50 atomic % iron it rises evenly and continuously from the compound FeCr (868°C) to the compound FeC (1225°C). This indicates the

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Phase Transformation in the System Iron - Chromium - Vanadium. (Cont.)

formation of the continuous range of solid solutions between these compounds. For alloys of the other sections, corresponding to various constant ratios of the concentrations of chromium to that of vanadium the temperature of the $\delta \rightarrow \alpha$ transformation changes with respect to the composition according to smooth curves with a maximum: for a 1 : 3 Cr : V ratio the maximum corresponds to a temperature of 1170°C, for a 1 : 1 ratio to 1095°C, for a 3 : 1 ratio to 970°C. Because of the difference in the properties of the α and δ phases the phase boundaries could be determined with great accuracy. The δ-phase range is represented by a smooth and continuous change in properties with composition, which confirms Kornilov's view of the δ-phase in the system iron - chromium - vanadium as a solid solution of metallic compounds. On the basis of the isothermal section of the ternary system for room temperature and the data of thermal analysis of the sections investigated, a spatial diagram has been constructed, which indicates that the δ-solid solution region of the compounds FeCr and FeV

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Phase Transformation in the System Iron - Chromium - Vanadium. (Cont.)

extends in the ternary system in the form of a tunnel-like shape from the binary system iron - chromium to the binary system iron - vanadium.

There are 9 references, 6 of them Russian.

Ref.3: I.I.Kornilov, Zheleznye Splavi, Vol.2, published by the Academy of Sciences of the USSR, 1951. Received 8 October, 1956.

15 Figures and 3 Tables.

Card 3/3

S/078/60/005/06/28/030
B004/B014

5.4700

AUTHORS: Kornilov, I. I., Matveyeva, N. M.

TITLE: Reaction Heat of the Transition of the σ-Phase Into the Solid α-Solution in the System Iron - Chromium

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 6, pp. 1387 - 1388

TEXT: By way of introduction, the authors describe the thermographic method which they used for their experiments. This method was suggested by L. G. Berg and V. Ya. Anosov (Refs. 1 and 2), and was improved by G. G.Tsurinov (Ref. 4). A substance which does not react with the substance to be tested, and whose thermal effects are exactly known serves as standard substance. Its thermal differential curve is recorded by a Kurnakov pyrometer along with the differential curve of the substance to be tested. The values of these thermal effects are obtained by graphical integration of the deviations from zero and on the strength of the known values of the standard substance. The present paper describes the transition of the σ-phase (composition of the alloy similar to that of FeCr)

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into the solid α-solution. The alloys were made from electrolytic chromium and Armco iron in an arc furnace filled with argon. Then, they were homogenized and annealed for 500 - 700 hours at 700°C in order to obtain the σ-phase. Iron with an $\alpha \rightarrow \beta$ transformation equal to 0.27 kcal/gram-atom and a $\beta \rightarrow \gamma$ transformation equal to 0.25 kcal/gram-atom was used as standard. The endothermic effects of the $\sigma \rightarrow \alpha$ transformation of the Fe-Cr alloy are between these two effects of the standard iron (Fig. 1). Analyses of the alloys under consideration, as well as their temperatures and heats of transformation are given in a table. The heats of transformation varied between 1.06 ± 0.05 and 0.73 ± 0.05 kcal/gram-atom, depending on the composition of the σ-phase. There are 1 figure, 1 table, and 7 references: 6 Soviet and 1 British.

SUBMITTED: January 6, 1960

Card 2/2

KORNILOV, I.I.; MATVEYEVA, N.M.

Vanadium and its fields of application. Trudy Inst. met. no.8: 58-81 '61. (MIRA 14:10)

(Vanadium)

KORNIKOV, I.I.; MATVEYEVA, N.M.

Chemistry of the vanadium metal. Trudy Inst. met. no.8:82-106 '61. (MIRA 14:10)

(Vanadium--Metallography)
(Phase rule and equilibrium)

5.4800 1297also 1413, 1418, 2808 25855 S/020/61/139/004/015/025
5.2610 B103/B206

AUTHORS: Kornilov, I. I., Matveyeva, N. M.

TITLE: Heat of dissociation of Kurnakov's compounds Ni_3Fe, Ni_3Mn, Ni_3Cr, and Ni_3V

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 139, no. 4, 1961, 880 - 883

TEXT: The heat of dissociation is defined as being the temperature of transition of a compound into a solid solution at the critical transition temperature. The authors recall that metallic compounds are formed from solid solutions (e. g., in the system Cu-Au, N. S. Kurnakov, S. Zhemchuzhnyy, M. Zasedatelev, ZhRFKhO, 47, 871 (1915)). In honor of their discoverer they were called Kurnakov compounds (I. I. Kornilov, Usp. khim. vyp. 9, 1045 (1952)). In publications (especially of the non-Soviet bloc, F. Rhines, J. Newkirk, Trans. Am. Soc. Metals, 45, 1029, 1953), they are considered to be the product of a single atomic regrouping connected with the ordering of the structure in the homogeneous medium, no phase transformation taking place in this case. Although in the systems Ni - Fe,

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Heat of dissociation of ....

Ni - Mn, and Ni - Cr the above-mentioned compounds Ni_3Me are formed from solid solutions, only a dotted line of the ordering of solid solutions used to be drawn in their equilibrium diagrams. The phase transformations mentioned might, however, be accompanied by considerable energy conversions. In comparing the phase-transformation temperatures of Ni_3Me alloys in the three systems mentioned with the heat of formation of Ni_3V and Ni_3Ti, the authors tried to gain new knowledge on the nature of transformations in these systems. They used the thermographic method by L. G. Berg and V. Ya. Anosov (Ref. 8: ZhOKh, 12, 31 (1942)) for the determination of the value of phase transformations of the systems mentioned in the title. This method is based on a comparison of the areas of peaks of differential heating curves corresponding to the thermal effects in the standard and the specimen. Iron was used as a standard. The thermal effects of the magnetic $\alpha \longrightarrow \beta$ and the polymorphous $\beta \longrightarrow \gamma$ transformation of iron are known. On the basis of their values, the authors found the relative error of determination involved in the method used here, by calculating the value of one thermal effect from that of the other. This calculated value is

Heat of dissociation of ...

compared with the value in the table. The authors established that the two compared values of the $\alpha \longrightarrow \beta$ Fe transformation differ by 2 - 5%, i.e., this difference lies within the range of accuracy of the method. Besides iron, nickel was also used as a standard for the determination of the thermal effects accompanying transformations in the alloys Ni - Mn, Ni - Fe, and Ni - Cr. The areas of the thermal effects were measured by geometric integration. Ni_3Me alloys were prepared in the arc furnace in an argon atmosphere from electrolytic Ni, Fe, Mn, Cr as well as from carbothermic vanadium (V content 99.8%). On the basis of a chemical analysis, alloys corresponding stoichiometrically to Ni_3Me were used for the investigation. They were subjected to: a) high-temperature homogenization annealing, b) long lasting annealing at temperatures below the critical transformation point: All alloys were annealed at 450°C except Ni_3V which was annealed at 950°C. The thermal effects were measured after annealing for 700, 1000, and 1400 hr. Table 1 gives the results. The highest value of ΔH was obtained for Ni_3Cr with 1400 hr annealing at 450°C (0.41 kcal/g-at). This value is much lower than the ΔH values of Ni_3Fe, Ni_3Mn, and Ni_3V. The

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Heat of dissociation of ...

authors presume that the compound forms here very slowly, and that the alloy did not reach equilibrium. This problem is to be investigated further. The authors point out the high ΔH value which is considerably greater than 1, except for Ni_3Cr. The strength of the chemical bond might be of different nature in alloys annealed for a long time than in solid solutions. In the alloys investigated, the ordering processes are obviously linked with the formation of more stable metallic compounds. In the authors' opinion, they must have independent ranges of existence in the phase diagram of the system, and two-phase ranges as phase transformation of first kind. The authors compare the data of Table 1 with the position of the respective metals in the periodic system. It is concluded that the ΔH values of all compounds mentioned are commensurable and increase (with the exception of Ni_3Cr) with the distance of the metal contained in the compound from the position of nickel in the periodic system. Consequently, a certain dependence of the properties of chemical compounds on the position of the components in the periodic system is maintained. The strength of the chemical bond in Ni_3Fe, Ni_3Mn, Ni_3V, and Ni_3Ti is apparently also determined by the heat of formation (heat of dissociation). It

Heat of dissociation of ...

increases with increasing difference of the chemical properties of the interacting metals, and is thus connected with the position of the reacting elements in the periodic system. The increasing strength of the chemical bond in the series Ni_3Fe, Ni_3Mn, Ni_3Cr, Ni_3V, and Ni_3Ti must be reflected in the mechanical strength of these compounds, which, however, is to be investigated additionally. There are 4 figures, 1 table, and 13 references: 8 Soviet-bloc and 5 non-Soviet-bloc. The two references to English-language publications read as follows: Ref. 6: P. Leech, S. Sykes, Phil. Mag., 27, No. 185 (1939); Ref. 7: O. Kubaschewski, et. al. Trans. Farad. Soc., 52, 214 (1954). The third one see in the body of the abstract.

ASSOCIATION: Institut metallurgii im. A. A. Baykova Akademii nauk SSSR (Institute of Metallurgy imeni A. A. Baykov of the Academy of Sciences USSR)

PRESENTED: March 13, 1961, by I. I. Chernyayev, Academician

SUBMITTED: February 22, 1961

Card 5/6

KORNILOV, I.I.; MATVEYEVA, N.M.

Metallurgical chemistry of vanadium. Usp.khim. 31 no.9: 1076-1103 S '62. (MIRA 15:9)

1. Institut metallurgii imeni A.A.Baykova.
(Vanadium) (Chemistry, Metallurgic)

KORNILOV, I.I.; MATVEYEVA, N.M.

Creep rate of the $MnNi_3$ compound as dependent on the equilibrium state. Dokl. AN SSSR 146 no.3:642-643 S '62. (MIRA 15:10)

1. Institut metallurgii im. A.A.Baykova. Predstavleno akademikom A.A.Bochvarom.

(Manganese-nickel alloys) (Creep of metals)

L 27501-66 EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/ETI JD/JW/GS/JH

ACC NR: AT6012370 SOURCE CODE: UR/0000/65/000/000/0056/0060

AUTHORS: Kornilov, I. I. (Doctor of chemical sciences, Professor); Matveyeva, N. N.

ORG: none

TITLE: Thermochemical investigation of alloys of the system Ti--Al in the α-solid solution region

SOURCE: Soveshchaniye po metallokhimii, metallovedeniyu i primeneniyu titana i yego splavov, 6th. Novyye issledovaniya titanovykh splavov (New research on titanium alloys); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1965, 56-60

TOPIC TAGS: titanium, aluminum, titanium alloy, heat of solution, heat of formation, hardness, solid solution

ABSTRACT: The integral heat of solution, the standard heat of formation, and the hardness of alloys formed in the system Ti--Al in the α-solid solution region were determined. The enthalpies were determined by measuring the appropriate heats of solution in 1% hydrofluoric acid. A schematic of the calorimeter is presented, as are the experimental results in graphs and tables (see Fig. 1). It was found that the minimum in integral heat of solution vs composition curve corresponded to the minimum hardness in the hardness vs composition curve and to the composition of the compound Ti$_3$Al. The experimental results are in good agreement with those of O. Kubaschewski and W. Dench (Acta metallurg., 1955, 3, No. 4). The standard heat of formation at 25C

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L 27501-66

ACC NR: AT6012370

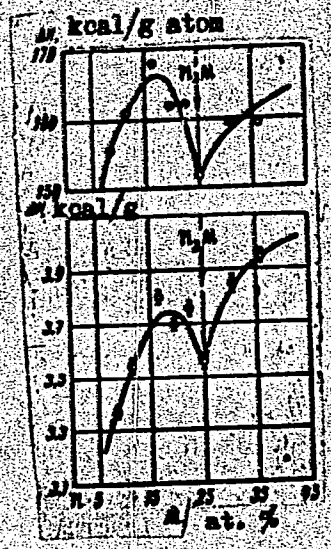

Fig. 1. Dependence of the heat of solution ΔH on the alloy composition of the system Ti--Al.

of the alloy containing 25 at. % Al was found to be 6.400 ± 0.125 kcal/g atom. Orig. art. has: 1 table and 3 figures.

SUB CODE: 11/ SUBM DATE: 02Dec65/ ORIG REF: 004/ OTH REF: 009

Card 2/2

L 36924-66 EWT(m)/T/EWP(t)/ETI IJP(c) JD/JG
ACC NR: AP6008497 SOURCE CODE: UR/0062/66/000/001/0008/0016

AUTHOR: Kornilov, I. I., Matveyeva, N. M.

ORG: Institute of Metallurgy im. A. A. Baykov (Institut metallurgii)

TITLE: Investigation in metal chemistry. Communication 5. Interaction between intermetallic compounds

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 1, 1966, 8-16

TOPIC TAGS: intermetallic compound, metal chemical analysis, solid solution

ABSTRACT: In this work the authors discuss the basic physicochemical factors determining the interactions between intermetallic compounds and cite their latest experimental data. Intermetallic compounds in equilibrium systems are treated as individual components. During their interaction continuous solid solutions, limited solid solutions, peritectic and eutectic mixtures, and ternary compounds or phases of a complex composition can form. In contrast to solid solutions of metals, the authors termed solid solutions on a base of metallic compounds intermetallic (metallide) solid solutions. Continuous or limited solid solutions of intermetallic compounds under certain conditions are formed between Kurnakov compounds, berthollide-type compounds, daltonide-type compounds, and compounds of the berthollide and daltonide types. The authors examined certain examples of the

Card 1/3 UDC: 547.559+549.2

interaction between compounds from the data of their investigations, one of the first systems with a continuous solid solution of intermetallic compounds being the system consisting of the CrFe and VFe Kurnakov compounds. These compounds are formed in binary systems from continuous α-solid solutions of components upon a drop of temperature. Both compounds with respect both to chemical and to structural features satisfy the basic conditions for the formation of continuous solid solutions expressed by the author, i.e., that the compounds should have an identical type of crystal structure with similar values of the lattice parameters, similar type of chemical bond in the compounds, the presence in the compositions of these compounds of the atoms of elements (analogs) capable of being continuously replaced in the crystal lattice of the compounds, the presence in the compositions of two interacting compounds of atoms of the same element, and that the compound should have an identical stoichiometric composition. The intermetallic compounds have special, individual properties and play a most important role in the physicochemical and mechanical properties of metal alloys. They have an independent importance as the base for new inorganic materials with special physical properties. The properties of intermetallic compounds can be appreciably modified by their interaction with one another and by the formation of intermetallic solid solutions, eutectic mixtures, and complex multielement compounds. The level of the physicochemical and mechanical properties in intermetallic compound systems is appreciably higher than in simple metallic systems.

L 36924-66

ACC NR: AP6008497 O

Intermetallic compounds and their solid solutions are new materials with special physical properties which are being used in various branches of technology. Orig. art. has: 7 figures.

SUB CODE: 07/ SUBM DATE: 22Aug63/ ORIG REF: 015/ OTH REF: 001

Card 3/3

SAMYGIN, G.A.; MATVEYEVA, N.M.

Protective action of solutions during extracellular formation of ice in plant tissues. Fiziol. rast. 12 no.3:516-524 My-Je '65. (MIRA 18:10)

1. Institut fiziologii rasteniy imeni K.A. Timiryazeva AN SSSR, Moskva.

3(10) PHASE I BOOK EXPLOITATION SOV/1758

Matveyeva, N. N.

Tablitsy znacheniy kompleksnykh koeffitsiyentov otrazheniya-prelomleniya prodol'nykh i poperechnykh (SV) voln v sluchaye dvukh odnorodnykh i izotropnykh uprugikh sred, nakhodyashchikhsya v zhestkom kontakte drug s drugom (Tables of values of complex coefficients of reflection and refraction of longitudinal and transversal (SV) waves in a case of two homogeneous and isotropic elastic mediums rigidly connected with each other) [Leningrad] Izd-vo Leningr. univ., 1957. 420 p. (Series: Materialy kolichestvennogo izucheniya dinamiki seysmicheskikh voln, tom. 1 (Materials of a Quantitative Study of the Dynamics of Seismic Waves) 1,100 copies printed.

Sponsoring Agencies: Akademiya nauk SSSR. Matematicheskiy institut. Leningradskoye otdeleniye, Leningrad. Universitet, and Vsesoyuznyy nauchno-issledovatel'skiy institut geofizicheskikh metodov razvedki.

Card 1/5

Tables of Values (Cont.) SOV/1758

Ed. of Series: G. I. Petrashen'; Ed.: G. I. Petrashen'; Tech. Ed.: R. S. Volkhover

PURPOSE: This book is intended for geophysicists analyzing the seismic records obtained by exploratory groups in search for oil and mineral deposits.

COVERAGE: This volume of tables provides the values of complex coefficients for reflection-refraction longitudinal and transverse (SV) waves together with values of transverse (SH) waves, the function values for directional sources, the coefficients of head wave formation, the conversion ratios, etc. The tables can be used either for the study of wave fields by means of numerical integration, or for approximate computation based on formulas derived from the plane wave theory or the beam method. This approach has a direct bearing on many practical problems in seismology and seismic exploration. Such tables, accompanied by explanatory notes, will facilitate the calculation of intensities of expected wave trends in the area to be explored, the expected signs of incidence and the forms of the waves.

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This advance information will improve the interpretative results by increasing the accuracy of observations and will provide a new approach to the study of seismic phenomena, including wave propagation in actual field conditions. The second volume of this series will aid in computing the dynamic characteristics of seismic (elastic) waves in bedded media. Work on the series is being done in cooperation with the facilities of the Department of Dynamics of LOMI and the Laboratory for the Study of the Dynamics of Elastic Media of LGU. The author expresses his thanks to his director G.I. Petrashen' for his interest and attention; to N.M. Terent'ev for his general advice; to Z.M. Kustova, who participated in the initial stages of the work; and to V.I. Loseva and V.G. Struman for handling technical matters. There are 9 Soviet references.

TABLE OF CONTENTS:

36168
S/181/62/004/003/006/045
B152/B102

I4.7400

AUTHORS: Boltaks, B. I., and Matveyeva, N. N.

TITLE: Diffusion of phosphorus in silicon

PERIODICAL: Fizika tverdogo tela, v. 4, no. 3, 1962, 609 - 614

TEXT: In the diffusion of phosphorus atoms in p-type silicon, a not yet fully clarified deviation was observed from the distribution function $\operatorname{erfc}(x/2\sqrt{Dt}) = 1 - \frac{2}{\sqrt{\pi}} \int_0^{x/2\sqrt{Dt}} \exp(-x^2)dx$ which holds for other elements of groups III and V. This deviation is explained by evaporation of phosphorus from the Si surface during diffusion. The Si single crystals (20 - 40 ohm·cm) used for the experiment were ground, etched in [illegible]-8 (SR-8), washed, and then introduced in quartz tubes together with small amounts of P^{32}. The tubes were evacuated and sealed, and heated in a furnace. One part of the furnace with the crystal had always the same temperature (1200°C) while the temperature of the other part containing the phosphorus was 1200°C in one and 250°C in another series of measurement. The holding

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periods were 12 and 24 hrs, respectively. To determine the distribution, thin layers were removed from the crystal and the radioactivity was measured. A calculation of the diffusion equation, with consideration of the evaporation of the diffusing substance, gives a family of curves for various evaporation probabilities of the P atoms (Fig. 4). Corresponding experiments with low P vapor pressures showed a distinct maximum. This maximum did not appear at constant saturation vapor pressure. Preliminary experiments with n-type Si yielded the distribution $\mathrm{erfc}(x/2\sqrt{Dt})$ under analogous test conditions. There are 7 figures and 7 references: 1 Soviet and 6 non-Soviet. The four most recent references to English-language publications read as follows: E. Tannenbaum, Solid State Electronics, 2, 123, 1961; L. A. D'Asaro, Solid State Electronics, 1, 3, 1960; F. A. Cunnell and C. H. Gooch, J. Phys. Chem. Solids, 15, 127, 1960; J. W. Allen, J. Phys. Chem. Solids, 15, 134, 1960.

ASSOCIATION: Institut poluprovodnikov AN SSSR Leningrad (Institute of Semiconductors AS USSR, Leningrad)

SUBMITTED: September 29, 1961

FEDOTOV, S.A.; MATVEYEVA, N.N.; TARAKANOV, R.Z.; YANOVSKAYA, T.B.

Longitudinal wave velocities in the earth's upper mantle in the region of the Japanese and Kurile Islands. Izv. AN SSSR. Ser. geofiz. no.8:1185-1191 Ag '64 (MIRA 17:8)

1. Institut fiziki Zemli AN SSSR.

MATVEYEVA, N.N.

Solving the diffusion equation in the case of approximated arbitrarily varying surface concentration. Zav.lab. 31 no.4:451-452 '65. (MIRA 18:12)

1. Institut poluprovodnikov AN SSSR.

ACCESSION NR: AP4019815 S/0279/64/000/001/0143/0150

AUTHOR: Kornilov, I. I. (Moscow); Matveyeva, N. P. (Moscow)

TITLE: Relationships between the heat of dissociation and refractoriness of type MeNi sub 3 metallic compounds

SOURCE: AN SSSR. Izv. Metallurgiya i gornoye delo, no. 1, 1964, 143-150

TOPIC TAGS: intermetallic compound, Kurnakov compound, alloy heat resistance, nickel alloy heat resistance, dissociation heat, nickel alloy phase conversion, metallic nickel compound, MeNi sub 3

ABSTRACT: The relationship between the heat of dissociation in a solid solution (ΔH) for $MeNi_3$-type compounds and the position of the Fe, Mn, Cr, V, and Ti components in the periodic table was studied after 700, 1000, and 1400 hrs. of hardening at 450 ($FeNi_3$, $MnNi_3$, $CrNi_3$) and 950C (VNi_3). An attempt was made to establish relationships between the changes in strength of chemical bonds (related to heat of reaction) and creep factors (25 kg/mm^2 at 450C), as well as the relative strength of alloys of similar chemical composition in a solid solution or compound state. The heat of dissociation for the so-called Kurnakov compounds ($FeNi_3$, $MnNi_3$, $CrNi_3$) reaches significant values, which approach those for VNi_3 and $TiNi_3$. The formation of these compounds, as well as VNi_3, from solid solutions represents a phase trans-

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ACCESSION NR: AP4019815

formation of the first order. The heat of dissociation increases in the order $FeNi_3$, $MnNi_3$, VNi_3 and $TiNi_3$, the increase being dependent on the position of the various metals in the periodic table; $CrNi_3$ requires further study. The heat resistance of $MeNi_3$ compounds is related to their heat of dissociation, $CrNi_3$ again excepted, and increases in the order $FeNi_3$, $MnNi_3$, $CrNi_3$, VN_3 and $TiNi_3$. The metallic compounds have better creep resistance than their parent solid solutions. The significant difference in heat resistance between metallic compounds and solid solutions of the same chemical composition is governed by different physicochemical characteristics and does not depend on the methods used to prepare the test samples. Orig. art. has: 5 graphs and 1 table.

ASSOCIATION: none

SUBMITTED: 23Feb63 DATE ACQ: 31Mar64 ENCL: 00

SUB CODE: ML NO REF SOV: 016 OTHER: 006

Card 2/2

MATVEYEVA, N.S.

Severo-Stavropol-Pelagiada gas field. Mat.GKZ no.2:71-78 '61.
(MIRA 16:3)
(Stavropol Territory—Gas, Natural—Geology)

MATVEYEVA, N.S. (Moskva); SYCHEV, V.V. (Moskva)

Theory of strong interaction between the boundary layer and an inviscid hypersonic flow. Prikl. mat. i mekh. 29 no.4:644-657 Jl-Ag '65. (MIRA 18:9)

MATVEYEVA, N.S.

Analysis of the appraisal of oil and gas reserves according to some structures of the region in the Mangyshlak Peninsula.
Mat. GKZ no.3[illegible]-60 '63 (MIRA 18:1)

NIKITINA, Z.I.; MATVEYEVA, N.V.; KHAK MUN TEN

Microbiological research on some soils in the Maritime Territory. Soob. DVFAN SSSR no. 15:59-64 '62. (MIRA 17:9)

1. Dal'nevostochnyy filial imeni Komarova Sibirskogo otdeleniya AN SSSR i Dal'nevostochnyy gosudarstvennyy universitet.

MATVEYEVA, N.Ya., kand.arkhitektury

Architecture of world and international exhibitions and fairs.
Opyt zarub. stroi. no.5:5-102 '62. (MIRA 15:12)
(Exhibitions) (Fairs) (Architecture)

NABIYEV, M.N.; PALETSKIY, G.V.; ANISIMKIN, I.G.; REHENKO, M.; KALININ, Ye.P.; TROFIMOV, S.M.; VURGAFT, G.V.; POPOV, V.S.; KOROL', P.Z.; KULIK, A.A.; KALMAN, L.A.; FARBER, S.I.; MATVEYEVA, N.Ye.; GAVRILOV, V.S.; KADYROV, V.K.; IL'YASOV, A.I.; YAKUBOV, S.G.; PROSKURIN, M.P.; NESTERENKO, A.P.; DEZHIN, N.D.; KOCHEROV, V., red.; POPOV, V., red.; SALAKHUTDINOVA, A., tekhn. red.

[Chirchik, a city of major industrial chemical complexes] Chirchik - gorod bol'shoi khimii. Tashkent, Gosizdat UzSSR, 1962. 82 p. (MIRA 16:6)

1. Chlen-korrespondent Akademii nauk UzSSR (for Nabiyev).
2. Rabotniki Chirchikskogo elektrokhimkombinata (for all except Nabiyev, Kocherov, Popov, V., Salakhutdinova).
(Chirchik—Chemical plants)

MATVEYEVA, O. A., Cand. Medic. Sci. (diss) "Reactivity of Blood System After Sub- and Total Resections of Stomach and in Case of Experimental Hepatitis in Dogs," Tomsk, 1961, 11 pp. (Omsk Med. Inst.) 250 copies (KL Supp 12-61, 286).

ACC NR: AP7001883 SOURCE CODE: UR/0362/66/002/012/1253/1258

AUTHOR: Dianov-Klokov, V. I.; Matveyeva, O. A.

ORG: Institute of Atmospheric Physics, Academy of Sciences SSSR (Institut fiziki atmosfery, Akademiya nauk SSSR)

TITLE: The effect of $[O_2]$ and $[O_2—N_2]$ complexes on the transparency of the atmospheric surface layer

SOURCE: AN SSSR. Izvestiya. Fizika atmosfery i okeana, v. 2, no. 12, 1966, 1253-1258

TOPIC TAGS: atmospheric physics, atmospheric transparency, atmospheric optics, molecular absorption, Rayleigh scattering, ozone, aerosol

ABSTRACT: Direct measurements and laboratory data imply that approximately 40% of the total diffuse molecular absorption in the lower atmosphere in the 2800—2300 Å region is due to short-lived $[O_2]_2$ and $[O_2—N_2]$ complexes. The contribution of molecular oxygen (O_2) is approximately the same. The sum of decimal absorption coefficients for these constituents and for the Rayleigh scattering coefficient equals unity at 2400 Å, and increases rapidly with decreasing wavelength. Even for a minimum concentration of aerosols and ozone in the lower atmosphere, the atmospheric transparency

 UDC: 551.521.3

ACC NR: AP7001883

limit in the ultraviolet region is estimated to occur at λ = 2400—2500 Å. Orig. art. has: 4 figures.

SUB CODE: 04/ SUBM DATE: 07May66/ ORIG REF: 001/ OTH REF: 006/
ATD PRESS: 5112

Card 2/2

MATVEYEVA, O. F.

"Course of Pregnancy and Childbirth During Hypertension." Cand Med Sci, Inst of Obstetrics and Gynecology, Acad Med Sci USSR, Leningrad, 1953. (RZhBiol, No 5, Nov 53)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No. 521, 2 Jun 55

VASILEVSKAYA, N.L.; MATVEYEVA, O.F.

Reticulocytosis in peripheral blood of the mother as a symptom of oxygen deficiency in the fetus. Akush. i gig. 33 no.2:5-11 Mr-Ap. '56. (MLRA 9:7)

1. Iz kliniko-diagnosticheskoy laboratorii (zav. - kandidat meditsinskikh nauk N.L.Vasilevskaya) i rodil'nogo otdeleniya (zav. - dotsent L.A.Reshetova) Instituta akusherstva i ginekologii AMN SSSR (dir.-prof. P.A.Beloshapko)

(PREGNANCY, blood in
reticulocytosis, as diag. of oxygen defic. of fetus)
(FETUS
oxygen defic., determ. by means of reticulocytosis determ. in mother)
(OXYGEN, defic.
in fetus, diag. by means of reticulocytosis determ. in mother)

SHLEYKHER, E.I.; ZVAGIL'SKAYA, V.N.; TIMOFEYEVA, M.Ye.; MATVEYEVA, O.G.

Studying some species of wild and domestic rodents as sources of endemic rickettsioses. Vop.kraev.pat. no.4:108-112 '54. (MIRA 9:12)
(RICKETTSIA) (RODENTS AS CARRIERS OF DISEASE)

MATVEYEVA, O. I.

USSR/Cultivated Plants - Fruits. Berries. M.

Abs Jour : Ref Zhur - Biol., No 10, ,958, 44331

Author : Matveyeva, O.I.
Inst :
Title : On the Significance of the Fruit Bearing of the Shoots.

Orig Pub : Sadovodstvo, vinogradarstvo i vinodeliye Moldavii, 1956, No 6, 37-39.

Abstract : In 1947 one half of the plot of the "Livadia" collective (Crimea) was planted with the fruit bearing cuttings of white Muscat and the other with the fruitless shoots of white Muscat in the third year of fruit bearing. Consideration of the elements of fruit bearing during 1950-1952 showed that the bushes grown from the fruitless shoots surpassed by 1.5-2 times the yield of the bushes grown from the fruit bearing shoots. The experiments started in 1954 showed that the ability of the cuttings

Card 1/2

L 07949-67 EWT(1)/EEC(k)-2/EWP(k) IJP(c) WG/GG
ACC NR: AP6027128 (A) SOURCE CODE: UR/0311/66/000/006/0022/0024

AUTHOR: Vol'kenshteyn, A. A. (Candidate of technical sciences); Yefremov, V. P. (Engineer); Kuvaldin, E. V. (Engineer); Matveyeva, O. K. (Engineer); Sazonov, V. M. (Engineer)

ORG: None

TITLE: Photometric equipment for pulsed light sources

SOURCE: Svetotekhnika, no. 6, 1966, 22-24

TOPIC TAGS: photometer, light pulse, laser pulsation, flash lamp

ABSTRACT: A unit for photometric measurement of pulsed light sources is described. This unit consists of three instruments: an FIL photometer for flash lamps, an FML-m photometer for lasers and a KOS standard light pulse generator. The FIL photometer may be used for measuring nearly all types of industrial flash tubes and the FML-m is used for measuring the radiation from free-emission lasers. The KOS instrument generates reproducible standard light pulses and is used for calibration of the two photometers. Photographs of each of the component instruments are given together with brief descriptions. The flash tube photometer may be used for measuring the luminous intensity of a light source with a maximum transverse dimension of 110 mm. The fundamental scale of the instrument has graduations of 100 candles/div, 10^5 nits/div and

Card 1/2 UDC: 535.242.2

10^{-3} ca·sec/div. These graduations may be expanded by five orders of magnitude for measuring higher intensities by changing the resistance of the load on the photocell, or by using neutral light filters. The time characteristics of the instrument are: least resolved duration of the leading front -- $5 \cdot 10^{-7}$ sec, pulse duration -- no more than 10^{-2} sec. The approximate value of a graduation on the FML-m photometer is 10 w and 10^{-4} joules per unit of the reference scale. The upper limits of measurement are 10^{8} w and 10^{3} joules. The unit may be used for laser measurements in the 400-1100 mμ spectral region. The time resolution of the photocell is a few tenths of a microsecond. The KOS instrument generates pulses with a duration of approximately 3 μsec and a luminous intensity of 200,000 ca. The authors consider it their pleasant duty to mention the considerable part played by N. F. Shipul', L. I. Mel'nikova, R. V. Tsyvkin, V. M. Shpan'kov and V. N. Kornilov in development of this photometric equipment. Orig. art. has: 3 figures.

SUB CODE: 13, 20/ SUBM DATE: None/ ORIG REF: 005

L 07949-67 EWT(l)/EEC(k)-2/EWP(k) IJP(c) WG/GG
ACC NR: AP6027128 (A) SOURCE CODE: UR/0311/66/000/006/0022/0024

AUTHOR: Vol'kenshteyn, A. A. (Candidate of technical sciences); Yefremov, V. P. (Engineer); Kuvaldin, E. V. (Engineer); Matveyeva, O. K. (Engineer); Sazonov, V. M. (Engineer)

ORG: None

TITLE: Photometric equipment for pulsed light sources

SOURCE: Svetotekhnika, no. 6, 1966, 22-24

TOPIC TAGS: photometer, light pulse, laser pulsation, flash lamp

ABSTRACT: A unit for photometric measurement of pulsed light sources is described. This unit consists of three instruments: an FIL photometer for flash lamps, an FML-m photometer for lasers and a KOS standard light pulse generator. The FIL photometer may be used for measuring nearly all types of industrial flash tubes and the FML-m is used for measuring the radiation from free-emission lasers. The KOS instrument generates reproducible standard light pulses and is used for calibration of the two photometers. Photographs of each of the component instruments are given together with brief descriptions. The flash tube photometer may be used for measuring the luminous intensity of a light source with a maximum transverse dimension of 110 mm. The fundamental scale of the instrument has graduations of 100 candles/div, 10^5 nits/div and

Card 1/2 UDC: 535.242.2

L 07949-67

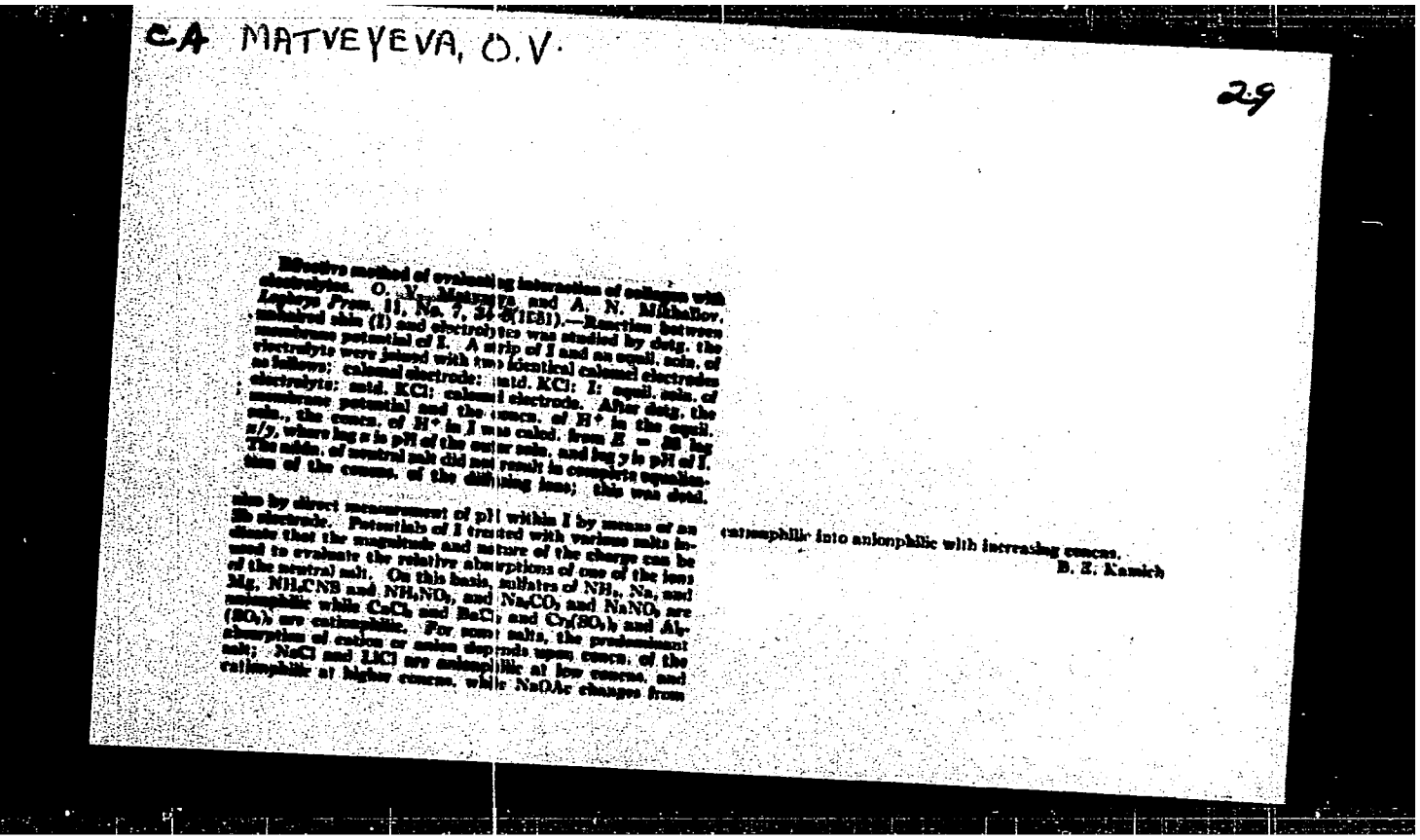
ACC NR: AP6027128

5

10^{-3} ca·sec/div. These graduations may be expanded by five orders of magnitude for measuring higher intensities by changing the resistance of the load on the photocell or by using neutral light filters. The time characteristics of the instrument are: least resolved duration of the leading front -- $5 \cdot 10^{-7}$ sec, pulse duration -- no more than 10^{-2} sec. The approximate value of a graduation on the FML-m photometer is 10 w and 10^{-4} joules per unit of the reference scale. The upper limits of measurement are 10^{8} w and 10^{3} joules. The unit may be used for laser measurements in the 400-1100 mμ spectral region. The time resolution of the photocell is a few tenths of a microsecond. The KOS instrument generates pulses with a duration of approximately 3 μsec and a luminous intensity of 200,000 ca. The authors consider it their pleasant duty to mention the considerable part played by N. F. Shipul', L. I. Mel'nikova, R. V. Tsyvkin, V. M. Shpan'kov and V. N. Kornilov in development of this photometric equipment. Orig. art. has: 3 figures.

SUB CODE: 13, 20/ SUBM DATE: None/ ORIG REF: 005

Card 2/2 LC



CA MATVEYEVA, O. V.

29

Effective method of evaluating interaction of collagen with electrolytes. O. V. Matveyeva and A. N. Mikhailov. *Leather Prom.* 11, No. 7, 31-3(1951).—Reaction between natural skin (I) and electrolytes was studied by detg. the membrane potential of I. A strip of I and an equil. soln. of electrolyte were joined with two identical calomel electrodes as follows: calomel electrode: satd. KCl; I; equil. soln. of electrolyte; satd. KCl; calomel electrode. After detg. the membrane potential and the concn. of H^+ in the equil. soln., the concn. of H^+ in I was calcd. from $E = \frac{RT}{F} \log \frac{a_1}{a_2}$, where log a is pH of the outer soln. and log y is pH of I. The addn. of neutral salt did not result in complete equalization of the concns. of the diffusing ions; this was detd. also by direct measurement of pH within I by means of an Sb electrode. Potentials of I treated with various salts indicate that the magnitude and nature of the charge can be used to evaluate the relative absorptions of one of the ions of the neutral salt. On this basis, sulfates of NH_4, Na, and Mg, NH_4CNS and NH_4NO_3, and Na_2CO_3 and $NaNO_3$ are anionophilic while $CaCl_2$ and $BaCl_2$ and $Cr_2(SO_4)_3$ and $Al_2(SO_4)_3$ are cationophilic. For some salts, the predominant absorption of cation or anion depends upon concn. of the salt; NaCl and LiCl are anionophilic at low concns. and cationophilic at higher concns. while NaOAc changes from cationophilic into anionophilic with increasing concns.

B. Z. Kamich

MATVEYEVA, O.V.

MATVEEVA, O.V. [illegible]

52/2595 (Influence of treatment of gelatine with tannins upon the true specific gravity of the compound). Vliianie tannidnogo dubleniia zhelatiny na istinnyi udel'nyi ves soedinenii.
Laykaia Promyshlennost', 11(8): 31-33, 1951.

MATVEYEVA, O.V.; MIKHAYLOV, A.N.

Distribution of ions between hide substance and the surrounding liquid during acid swelling. Kozhevn. Prom. 12, No.8, 18-19 '52. (MLRA 5:7)
(CA 47 no.19:10257 '53)

MATVEIEVA, O.V.

Vegetation of the Quaternary period in the Pavlodar region of the Irtysh Basin. Trudy Inst.geol.nauk 141:70-79 '53. (MLRA 6:12)
(Irtysh basin--Pollen, Fossil) (Pollen, Fossil--Irtysh basin)

MATVEYEVA, O.V.

Spore and pollen spectra of Quaternary sediments of the Altai foothills. Izv. Sib. otd. AN SSSR Geol. i geofiz. no. 1:72-83 '58. (MIRA 14:5)

1. Geologicheskiy institut AN SSSR.
(Altai mountain region—Sediments (Geology))
(Palynology)

GOLUBEVA, L.B.; GITERMAN, R.Ye.; KORENEVA, Ye.V.; MATVEYEVA, O.V.; ARKHIPOV, S.A., ovt.red.; GALUSHKO, Ya.A., red.izd-va; GUSEVA, A.P., tekhn.red.

[Spore-pollen spectra of Quaternary sediments in Western and central Siberia and their stratigraphic importance] Sporovo-pyl'tsevye spektry chetvertichnykh otlozhenii zapadnoi i tsentral'noi Sibiri i ikh stratigraficheskoe znachenie. Moskva, Izd-vo Akad.nauk.SSSR, 1960. 114p. (Akademiia nauk SSSR Geologicheskii institut. Trudy, no.31) (MIRA 13:2)

(Siberia--Palynology)

ARKHIPOV, S.A.; MATVEYEVA, O.V.

Spore and pollen spectra of Pre-Samarian deposits of the Anthropogen in the glaciation zone of the West Siberian Lowland adjoining the Yenisey River. Dokl. AN SSSR 135 no.6:1453-1456 D '60.
(MIRA 13:12)

1. Geologicheskiy institut Akademii nauk SSSR. Predstavleno akademikom V.N. Sukachevym.
(Sarchikha Valley--Paleobotany, Stratigraphic)

MATVEYEVA, O.V.; MOSKVITIN, A.I.

Age and conditions of the formation of the first upper flood terrace of the Tsna River near Yaltunovo in Ryazan Province. Biul. Kom. chetv. per. no.24:56-65 '60. (MIRA 16:7)

(Tsna Valley--Terraces(Geology))

GITERMAN, R.Ye.; GOLUBEVA, L.V.; ZAKLINSKAYA, Ye.D.; KORENEVA, Ye.V.; MATVEYEVA, O.V.

Features of the vegetation cover of Kazantseva Interglacial Siberia. Dokl. AN SSSR 152 no.4:937-940 O '63. (MIRA 16:11)

1. Geologicheskiy institutut AN SSSR. Predstavleno akademikom V.N. Sukachevym.

ARKHIPOV, Stanislav Anatol'yevich; MATVEYEVA, Ol'ga Vladimirovna; PUMINOV, A.P., kand. geol.-mineralog. nauk, otv. red.; SNITSARENKO, A.A., red.

[Quaternary of the southern margin of the Yenisey Depression.] Antropogen iuzhnoi okrainy Eniseiskoi depresii. Novosibirsk, 1964. 127 p. (Akademiia nauk SSSR. Sibirskoe otdelenie. Institut geologii i geofiziki. Trudy, no.29)

(MIRA 17:12)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR (for Puminov).

ARKHIPOV, S.A.; MATVEYEVA, O.V.

Quaternary pre-Samarovo series of the southern margin of the Yenisey Depression. Trudy Inst. geol. i geofiz. Sib. otd. AN SSSR no.25:5-22 '64. (MIRA 17:10)

ARKHIPOV, S.A.; MATVEYEVA, O.V.

Spore-pollen spectra and some problems in the stratigraphy of Quaternary marine sediments in the lower reaches of the Yenisey. Trudy Inst. geol. i geofiz. Sib. otd. AN SSSR no.44:225-242 '64. (MIRA 17:11)

AIEKSEYEV, V.A.; KIND, N.V.; MATVEYEVA, O.V.; TROITSKIY, S.L.

New data on the absolute chronology of the Upper Pleistocene and Holocene of Siberia. Dokl. AN SSSR 160 no.5:1147-1150 F '65. (MIRA 18:2)

1. Geologicheskiy institut AN SSSR. Submitted May 27, 1964.

GITERMAN, R.Ye.; GOLUBEVA, L.V.; KORENEVA, Ye.V.; MATVEYEVA, O.V.

Characteristics of the vegetative cover of the Zyryanka glacial period in Siberia. Izv. AN SSSR. Ser. geol. 30 no.3:115-128 Mr '65. (MIRA 18:3)

1. Geologicheskiy institut AN SSSR, Moskva.

MATVEYEVA,

USSR.

Reaction of piperylene and 2,4-hexadiene with unsaturated nitro compounds. E. G. Kataev and R. S. Matveeva. *J. Gen. Chem. U.S.S.R.* 23, 413-17(1953) (Engl. translation).—See *C.A.* 48, 3272a. H. L. H.

MATVEYEVA, Rakel; VISKARI, Eyne; FORSMAN, Khel'ga; RANTANEN, Astrid; SALMI, Khil'ya; TERVONEN, Lidiya; KHEGLUND, Lempi; KURKI, Mariya; LEMPINEN, Khanna; RUKHKANEN, Kyullikki; MANNILA, An'ya; PUTTONEN, Katri.

For the common good. Rabotnitsa 36 no.8:22 Ag '58. (MIRA 11:9)
(Russia--Description and travel)

MESHKOVA, N.P.; MATVEYEVA, R.A.; SHKARENKOVA, L.S.

Oxidation and carbohydrate-phosphate metabolism of rat muscles in local tetanus. Vop. med. khim. 7 no. 1:85-93 Ja-F '61.
(MIRA 14:4)

1. Chair of Animal Biochemistry, Moscow State University.
(MUSCLES) (TETANUS) (METABOLISM)

MATVEYEVA, R.A.; LAPUK, Ya.I.; STEPANOV, V.M.

Colorimetric method for determining the activity of chymotrypsin and trypsin. Izv. AN SSSR. Ser.khim. no.3:501-504 Mr '64.
(MIRA 17:4)

1. Institut khimii prirodnykh soyedineniy AN SSSR i Institut biofiziki AN SSSR.

IL'YUCHENOK, R.Yu.; [illegible]TVEYEVA, R.B.

Studies on th effect of adreno- and cholinolytic drugs in the trigeminal section of the brain stem. Farm. i toks. 26 no.5:525-531 [illegible]0 '63. (MIRA 17:8)

1. Laboratoriya farmakologii (zav. - kand. med. nauk R.Yu. Il'yuchenok) Instituta eksperimental'noy biologii i meditsiny Sibirskogo otdeleniya AN SSSR.

IL'YUCHENOK, R.Yu.; MATVEYEVA, R.B.

Participation of M-choline-reactive systems in the mechanism of the central action of aminazine. Farm. i toks. 28 no.6:643-646 N-D '65. (MIRA 19:1)

1. Laboratoriya farmakologii (zav. - kand.med.nauk R.Yu. Il'yuchenok) otdela eksperimental'noy biologii Instituta tsitologii i genetiki Sibirskogo otdeleniya AN SSSR, Novosibirsk.

MATVEYEVA, R. G. PA 175T66

USSR/Minerals - Crystallography 11 Jul 50

"Determining the Parameters of Beryl by the Method of Partial Projections," N. V. Belov, Corr Mem, Acad Sci USSR, R. G. Matveyeva

"Dok Ak Nauk SSSR" Vol LXXII, No 2, pp 299-302

Discusses partial projections, new method for structural analysis of crystals. Previously diagrams of atomic arrangement were synthesized in form of projections of the cell on coordinate axes, from which coordinates (parameters) were read directly. In partial projections,

175T66

USSR/Minerals - Crystallography 11 Jul 50
(Contd)

only part of the cell, e.g., ½, 1/3, is projected. Results obtained for beryl agree for the most part with those obtained by Bragg and West in 1926. Submitted 20 May 50.

175T66

LEVANOV, Yu.M.; MATVEYEVA, R.N.

Blood serum proteins in patients with chronic brucellosis. Trudy Inst.kraev.pat.AN Kazakh SSR 12:231-235 '62. (MIRA 15:11)
(BLOOD PROTEINS) (BRUCELLOSIS)

DIBROV, I.A., MASHOVETS, V.P.; MATVEYEVA, R.P.

Density and compressibility of sodium hydroxide aqueous solutions at high temperatures. Zhur.prikl.khim. 37 no.1:29-36 Ja '64. (MIRA 17:2)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.

MATVEYEVA, R.P.

Nutrition of young pike perch on a fish farm in 1953. Vop.ikht. no.5:61-70 '55. (MLRA 9:5)

1. Kaspiyskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta morskogo rybnogo khozyaystva i okeanografii, VNIRO. (Perch) (Fishes--Food)

MATVEYEVA, R.P.

Food of young clupeid fishes in the northern Caspian. Trudy Gidrobiol. ob-va 8:368-386 '57. (MIRA 11:3)

1. Kaspiyskiy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii.
(Caspian Sea--Herring) (Fishes--Food)

LESNIKOV, L.A.; MATVEYEVA, R.P.

Nature of the effect of waters discharged by the Volga River on the zooplankton of the Northern Caspian. Trudy VNIRO 38:176-203 '59. (MIRA 13:4)

(Caspian Sea--Zooplankton)

MATVEYEVA, R.P.

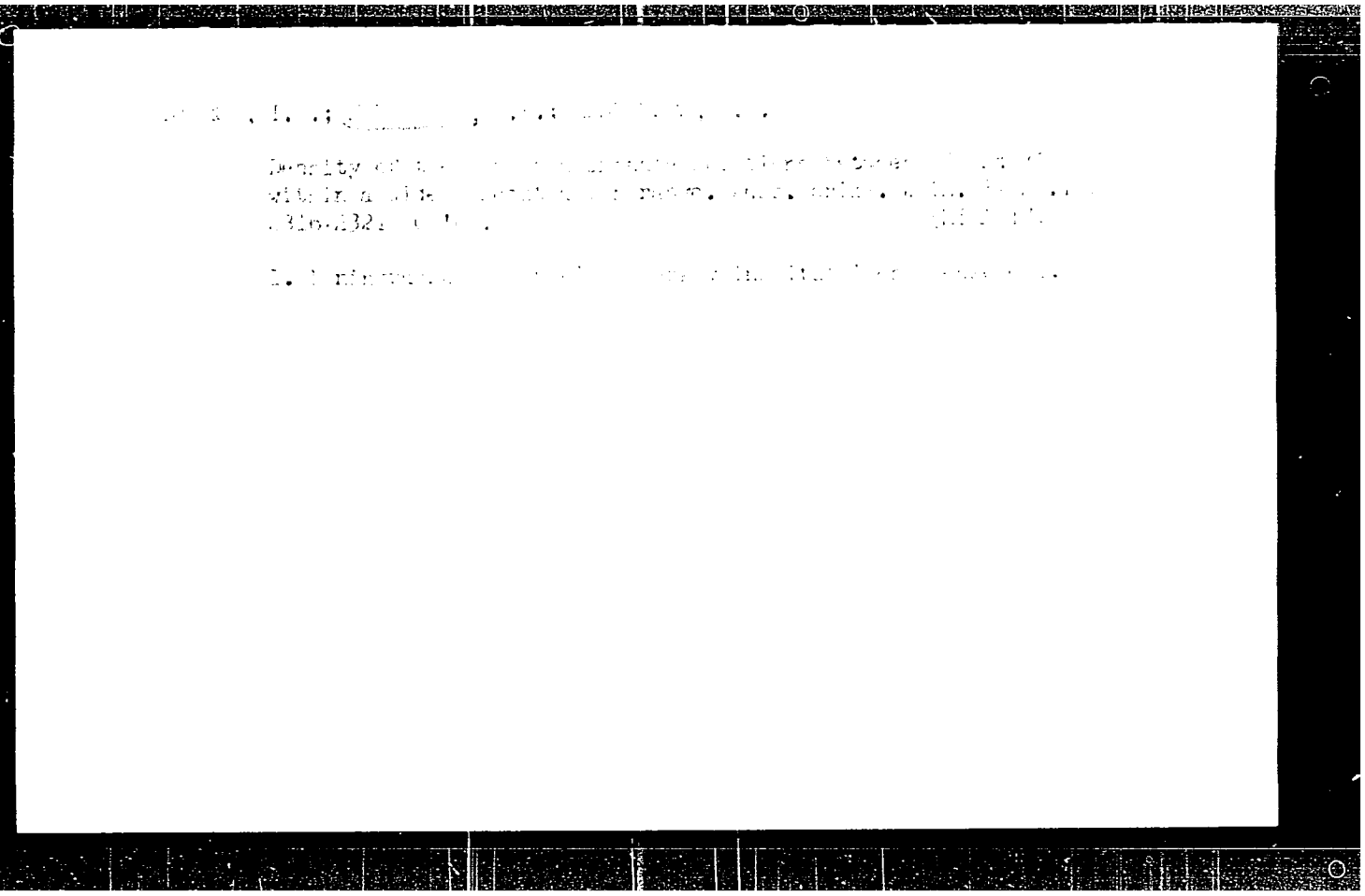
Feeding and food resources of herring larvae in the lower Volga before and after the construction of the Volgograd Dam. Vop. ikht. 2 no.2:325-335 '62. (MIRA 15:11)

1. Kaspiyskiy nauchno-issledovatel'skiy institut rybnogo khozyaystva i okeanografii -(KaspNIRO).
(Volga River--Herring) (Fishes--Food)

MATVEYEVA, R.P.

Food of the larvae of herring in the lower Volga River before and after the construction of the Volgograd Dam. Trudy Gidrobiol. ob-va 12:235-244 '62. (MIRA 15:12)

1. Kaspiyskiy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii, Astrakhan'.
(Volga River—Herring—Food)



BARON, N.M.; BARANOVA, T.A.; MATVEYEVA, R.P.

Density of sodium aluminate solutions at temperatures from 25 to 90°. Zhur. prikl. khim. 38 no.1:185-188 Ja '65.
(MIRA 18:3)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.

MASHOVETS, V.P.; KRUMGAL'Z, B.S.; DIBROV, I.A.; MATVEYEVA, R.P.

Saturated vapor pressure of KOH solutions up to 400° and the activity of water in solutions of LiOH, NaOH, and KOH within a wide range of concentrations. Zhur. prikl. khim. 38 no. 10:2342-2344 O '65.

Density of aqueous KOH solutions at high temperatures within a wide range of concentrations. Ibid.:2344-2347 (MIRA 18:12)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta. Submitted July 22, 1964.

MOKHOV, L.A.; MATVEYEVA, S.A.

Colorimetric quantitative determination of the hydrogen sulfide content of the air. Lab. delo 8 no.3:44-47 Mr '62. (MIRA 15:5)
(COLORIMETRY) (HYDROGEN SULFIDE) (AIR--POLLUTION)

MATVEYEVA, S.F

RAKOCH, G.M.; MATVEYEVA, S.F.

Removal of chlorine from solutions in the hydrometallurgy of zinc.
TSvet.met. 27 no.6:35-38 N-D '54. (MIRA 10:10)
(Zinc--Metallurgy) (Chlorine)

RAKOCH, G.M.; MATVEYEVA, S.F.

Work experience with pulp purification in the production of zinc.
TSvet.met. 29 no.3:20-25 Mr '56. (MIRA 9:7)

1.Chelyabinskiy tsinkovyy zavod imeni S.M.Kirova.
(Chelyabinsk--Zinc--Metallurgy)

MATVEYEVA, S.G.

Rabin's theorem on the complexity of computable functions. Sib. mat. zhur. 6 no.3:546-555 My-Je '65. (MIRA 18:8)

MATVEYEVA, S. I. CandBiolog Sci

Dissertation: "Development of the Nervous Elements in the Wall of Small Intestine of Human." 9/5/50

Academy Med Sci USSR

SO Vecheryaya Moskva
Sum 71

MATVEYEVA S.I.

Lab. of digest. Phys. and Path.; Phys. Inst., USSR Acad. of med. Scis. "Changes in the intramural nervous system of the stomach and the duodenum in peptic ulcer experimentally produced with the aid of atophan (Russian text) ARKH. PATOL. (Moscow) 1953, 6 (64-69) Illus. 6

Experiments were made in 18 dogs and the results were compared with those obtained in 5 cases of human peptic ulcer. Administration of 0.2 g. atophan per kg. body weight was followed by the occurrence of marked changes in the intramural ganglia (shrinking or swelling of ganglion cells, degeneration, club-shaped swelling of nerve fibres etc.) in addition to ulcerations. The changes were highly similar to the intramural ganglion changes seen in human peptic ulcer; the changes were partly reversible. Brandt - Berlin

SO: Excerpta Medica
Section V
Vol. 7 No. 10

AUTHORS: Matveyeva, S. P., Geller, B. E., Pakshver, A. B. SOV/156-58-3-39/52

TITLE: The Influence of the Properties of the Polyacrylnitrile Fiber on the Conditions for Dying it (Vliyaniye svoystv poliakrilonitril'nogo volokna na usloviya yego krasheniya)

PERIODICAL: Nauchnyye doklady vysshey shkoly, Khimiya i khimicheskaya tekhnologiya, 1958, Nr 3, pp. 553 - 555 (USSR)

ABSTRACT: The dying of synthetic fibers depends on the rate of diffusion of the coloring substance in the interior of the fiber. The diffusion coefficient of the coloring substance in the polyacrylnitrile fiber is very small, which makes it difficult to dye. Newly-produced fiber can be dyed well and evenly with acid and basic coloring substance after washing and before complete drying. After the drying process the fibers lose almost completely their absorptive power for the coloring substances. The experiments carried out showed that a sarisfactory dying of the polyacrylnitrile fiber is possible only when the fiber is slightly swollen prior to its complete drying. There are 1 figure and 7 references, 5 of which are Soviet.

Card 1/2

The Influence of the Properties of the Polyacrylnitrile Fiber on the Conditions for Dying it SOV/156-58-3-39/52

ASSOCIATION: Kafedra khimicheskoy tekhnologii voloknistykh materialov Vsesoyuznogo zaochnogo instituta tekstil'noy i legkoy promyshlennosti (Chair for the Chemical Technology of Fiber Materials at the All-Union Institute for the Study by Correspondence of Textile and Light Industry)

SUBMITTED: February 27, 1958

Card 2/2

LYAMZIN, I.T.; CHEREPANOV, V.N.; MATVEYEVA, S.P.; YEGOROVA, A.S.; BUYLENKO, V.I.

Destruction of alkali in the presence of sodium chlorate contained in the caustic soda solution. Khim. volok. no.3:57 '65. (MIRA 18:7)

1. Ryazanskiy kombinat iskusstvennogo volokna.

15.5550
5.3832
~~5(4), 5(3)~~

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SOV/183-59-5-4/28

AUTHORS: Matveyeva, S. P., Myagkov, V. A.

TITLE: Determining the Molecular Weight of Polyethylene Terephthalate on the Basis of Terminal Groups

PERIODICAL: Khimicheskiye volokna, 1959, Nr 5, pp 18-21 (USSR)

ABSTRACT: The authors developed a simple and sufficiently accurate method for the quantitative determination of terminal carboxylic groups in polyethylene terephthalate. The determination is based on direct titration of polyester dissolved in aniline with 0.05 N alcoholic NaOH and phenol phthalein as an indicator at 70-75°C. The substance is dissolved in aniline at 130-140°C. Table 1 of the paper shows the content of COOH groups in the "lavsan" fiber and in the "lavsan" resin at various dissolution times and constant temperature. It appears that polyethylene terephthalate is not destroyed by a 40-minute dissolution in aniline at 130-140°C. Additionally, the method suggested by W. Griehl and S. Neue (Ref 6) for the quantitative determination of terminal hydroxyl groups was modified according to the properties of polyethylene terephthalate. The method is based on bromine acetylation of the OH groups by means of bromoacetyl

Card 1/3

Determining the Molecular Weight of Polyethylene Terephthalate on the Basis of Terminal Groups

bromide in nitrobenzene, and subsequent determination of the bromine content. The bromoacetylated product is first hydrolyzed by potash lye, the bromine ion is precipitated with silver nitrate, and the excess Ag ion back-titrated with 0.05 N ammonium rhodanide solution. It was shown that the polyester investigated, in all stages of its production and processing, contains terminal OH- and COOH groups (Table 5). The molecular weight of the polyester investigated was computed from the content of terminal carboxyl- and hydroxyl groups by the equation

$$M_{gr} = \frac{1}{0.5\ (OH+COOH).10^{-6}}$$

on one hand, and according to Griehl and Neue from the specific viscosity η of a 0.5% solution (solvent phenol + tetrachloroethane 1 : 1) at 20°C, on the other. The authors mentioned give for this purpose, two different equations; only one of them, $M_v = \frac{0.86(\eta)}{1.27 \cdot 10^{-4}}$, supplies useful values whereas the values obtained by the second equation

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SOV/183-59-5-4/28

Determining the Molecular Weight of Polyethylene Terephthalate on the Basis of Terminal Groups

are too high (Table 4). There are 5 tables and 7 references, 2 of which are Soviet.

ASSOCIATION: Kalininskiy filial VNIIV (Kalinin Branch of the VNIIV)

Card 3/3

MATVEYEVA, T. A.

Matveyeva, T. A. - "Seasonal changed in the stone agglomerations of the lithoidal environment in the Dal'ne-Zelenets Bay," Trudy Murman. biol. stantsii, Vol. I, 1948, p. 123-455 - Bibliog; 12 items

SO: U-3600, 10 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 6, 1949).

MATVEYEVA, T. A.

Matveyeva, T. A. - "The biology of Mytilus edulis L. of eastern Murman. biol. stantii Vol. I, 1948, p. 215-41 - Bibliog: 25 items

SO: U-3600, 10 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 6, 1949).

MATVEYEVA, T. A.

Kuznetsov, V. V. and Matveyeva, T. A. - "Data relating to the bioecological characteristic of sea invertebrates of eastern Murman," Trudy Murman. biol. stantsii, Vol. I, 1948, p. 242-60

SO: U-3600, 10 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 6, 1949).

MATVEYEVA, T. A.

"Seasonal and Diurnal Variations in the Activity of Bait Infestation in Marine Invertebrates," Priroda, No. 3, 1948.

MATVEYEVA, T. A.

Mur., Murmansk Biological Sta., Acad. Sci., -c1948-c49-. Biology.
"Influence of the Density of Population on Some Biological Processes in the Natural Populations of Balanus balanoides (L.) in Eastern Murman," Dok. AN, 64, No. 4, 1949. "Seasonal Change in the Littoral population of the Stone Environment of the Bay of Dal'ne - Zelenetska," Trudy Murman. Biol. Sta., No. 1, 1948; "Data for Bioecological Characteristics of Marine Invertebrates of Eastern Murman," Dok. AN, 64, No. 4, 1949. "Biology of Mytilus Edulis (L.) of Eastern Murman; Dok. AN, 64, No. 4, 1949.

MATVEYEVA, T.A.

Methods of propagation of bivalvular sea mollusks. Dokl.AN SSSR 93 no.5: 923-924 D '53. (MLRA 6:12)

1. Murmanskaya biologicheskaya stantsiya Kol'skogo filiala Akademii nauk SSSR. Predstavleno akademikom Ye.N.Pavlovskim.

(Mollusks)

MATVEYEVA, T.A.

Biology and the biological cycle of Acmaea testudinalis (Müll.) in the region of the Eastern Murman Coast. Trudy Murm. biol. sta. 2:32-47 '55. (MIRA 10:8)

(Murman Coast--Gastropoda)